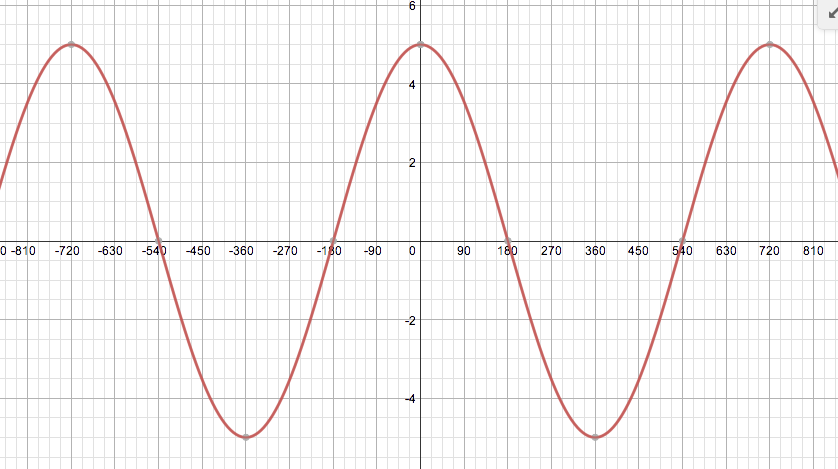
**ATHS FC – Math Department Al Ain**

**Assignment 1 (**Term I**)-Grade 11 Regular**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** |  | **Date** |  |
| **Name** |  | **Lesson** | **12.7 Graphing Trigonometric Functions**  **12.8 Translations of Trigonometric Graph** |
| **ID** |  | **Marks** | **/5** |

Q1) Find the amplitude (or asymptotes) and period of each function. Then graph the function.

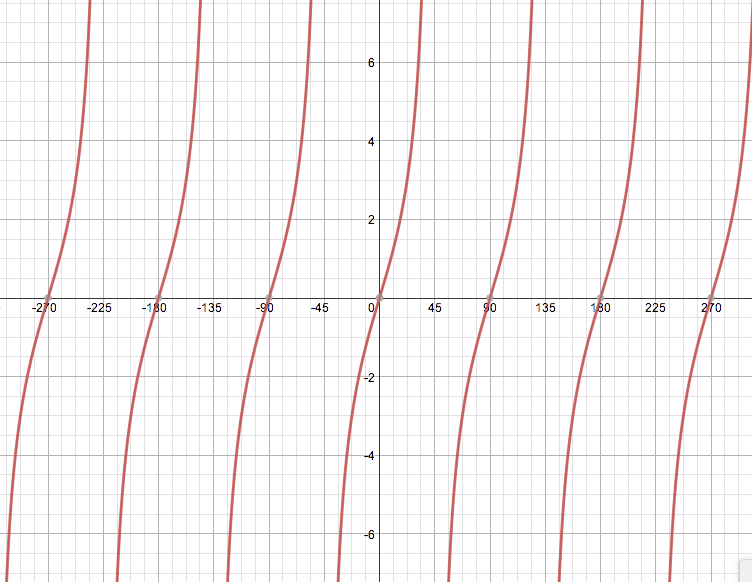
1. 

Amplitude: 5,

Period: =720

Draw dashed lines for

the amplitudes

1. 

Asymptotes: ,

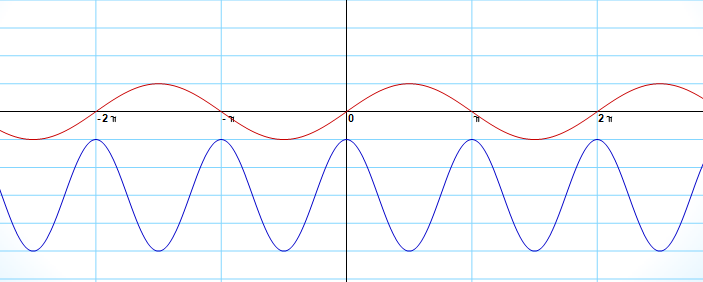
Period: =90

Q2) State the amplitude, period, phase shift, and vertical shift for each function. Then graph the function.

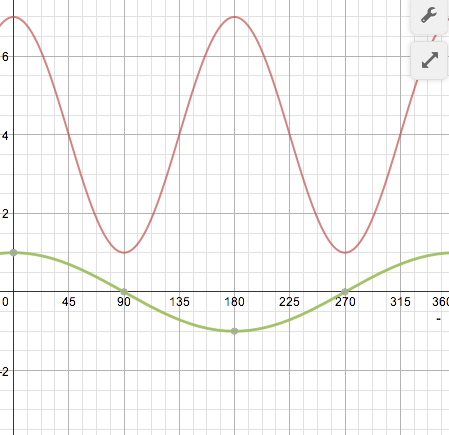
a)

Amplitude: 2, Period: =180 Phase shift: Vertical shift: 3 units to down

Draw dashed lines for the midline , and for the amplitude



b)



Amplitude:3, Period: =180

Phase shift:NO Vertical shift: 4 units up

Draw dashed lines for the midline , and for the amplitude

You need to draw two cycles in this case

Q3) **WEATHER** The function,where *t* is in months and *t*=0 corresponds to April 15, models the average high temperature in degrees Fahrenheit in Centerville.

1. Determine the period of this function. What does this period represent?

Period: =12, every 12 months the weather will repeat itself.

1. What is the maximum high temperature and when does this occur?

85 Fahrenheit, July 15

Q4) Write a trigonometric function that has amplitude of 5 and period of 720. Then graph the function.

or

Q5) Match the function with its graph. 1-F 2-B 3-E 4- A 5-C 6-D

